Table 6 – Action Specific ARARs			
Regulatory Citation	**Description of Regulatory Requirement**	**Rationale for Including**	**Application**
Surface Water			
Federal: Clean Water Act of 1972 (Public Law 107-303), as amended; 33 USC 1251 et seq. State: "Water Pollution Control" (RCW 90.48, as amended); "Water Quality Standards for Surface Waters of the State of Washington" (WAC 173 201A)			
Clean Water Act, Section 404, 33 USC 1344 and Section 404(b)(1) Guidelines, 40 CFR Part 230 (Guidelines for Specification of Disposal Sites for Dredged or Fill Material)	CWA §404 regulates the discharge of dredged or fill material into waters of the U.S, including return flows from such activity. This program is implemented through regulations set forth in the 404(b)(1) guidelines, 40 CFR Part 230. The guidelines specify: the restrictions on discharge (40 CFR 230.10); the factual determinations that need to be made on short-term and long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic environment (40 CFR 230.11) in light of Subparts C through F of the guidelines; and the findings of compliance on the restrictions (40 CFR 230.12). Subpart J of the guidelines provide the standards and criteria for the use of all types of compensatory mitigation when the response action will result in unavoidable impacts to the aquatic environment.	CWA 404 requirements are **Applicable** to in-water construction activities including dredging and backfilling contaminated areas of the intertidal beaches and installing the new perimeter wall.	RI/FS information indicates that the remedy can be implemented in compliance with Section 404 requirements. However, more detailed remedial design information will be required to fully assess impacts and specify all of the requirements and controls that will need to be placed on dredging and placement of backfill materials to minimize or avoid impacts. Also through the 404 analysis in remedial design, exact amounts of compensatory mitigation for unavoidable loss of aquatic habitat will be determined and mitigation plans developed.
Clean Water Act, Section 402, 33 USC 1342	Regulates discharges of pollutants from point sources to waters of the U.S., and requires compliance with the standards, limitations and regulations promulgated per Sections 301, 304, 306, 307, 308 of the CWA. CWA §301(b) requires all direct	These requirements are **Applicable** to the discharge of groundwater though passive drains to the beaches, and/or the discharge of stormwater from the surface of the cap. Federal regulations apply where the requirements are more stringent than state	Groundwater discharged through passive drains will be treated using activated carbon filters in the drain system until contaminant concentrations are at or below discharge standards.

	dischargers to meet technology-based requirements. These requirements include, for conventional pollutants, application of the best conventional pollutant control technology (BCT), and for toxic and nonconventional pollutants, the best available technology economically achievable (BAT). Where effluent guidelines for a specific type of discharge do not exist, BCT/BAT technology-based treatment requirements are determined on a case-by-case basis using best professional judgment (BPJ). Once the BPJ determination is made, the numerical effluent discharge limits are derived by applying the levels of performance of a treatment technology to the wastewater discharge.	promulgated point discharge requirements.	
Clean Water Act, 33 USC 1341, (Section 401), 40 CFR Section, 121.2(a)(3), (4) and (5) Also see WAC 173-225-000 "Federal Water Pollution Control Act--Establishment of Implementation Procedures of Application of Certification"	Any federally authorized activity which may result in any discharge into navigable waters requires reasonable assurances that the activity will be conducted in a manner which will not violate applicable water quality standards by the imposition of any effluent limitations, other limitations, and monitoring requirements necessary to assure the discharge will comply with applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of the Clean Water Act.	**Relevant and Appropriate** CWA 401 requirement, if more stringent than state implementation regulations, that in-water response actions that result in a discharge of pollutants comply with water quality standards through the placement of water quality-based conditions and other requirements on the discharge deemed necessary. Actions to implement the remedial action that may result in discharges to state waters include, but may not be limited to, dredging and backfilling of contaminated areas of intertidal beaches.	Conditions and other requirements deemed necessary so that state water quality standards are not violated will be placed on any such discharge.
40 CFR 131.36(b)(1) as applied to Washington, 40 CFR	Establishes numeric water quality criteria for priority toxic pollutants for	**Applicable** requirement for discharge of groundwater, if groundwater does	Groundwater discharged through passive drains will be treated using

131.36(d)(14) "Toxics Criteria for Those States Not Complying with Clean Water Act"	the protection of human health and aquatic organisms which supersede criteria adopted by the state, except where the state criteria are more stringent than the federal criteria.	not meet state standards following remediation of site soils.	activated carbon filters in the drain system until contaminant concentrations are at or below discharge standards.
40 CFR 122.26, Clean Water Act Stormwater Multi-Sector General Permit for Construction Activities	Requires the use of best management practices to prevent the discharge of stormwater to surface water during construction activities	Relevant and Appropriate for managing stormwater generated during upland construction activities.	Remedial actions that have the potential to generate stormwater runoff will meet these standards. WAC 173-201A-510(3)(a), (b) and (c) - Nonpoint source and stormwater pollution Helen: need to cite relevant WAC sections
Air			
Federal: Clean Air Act/State: "Washington Clean Air Act" (Chapter 70.94 RCW, as amended); State: "General Regulations for Air Pollution Sources" (WAC 173 400); "Controls for New Sources of Toxic Air Pollutants" (WAC 173 460); Regional: Regulations I and III, Puget Sound Clean Air Agency			
Clean Air Act, 40 CFR Parts 50 and 52	Places restrictions on air emissions from stationary and mobile sources that creates threats to human health as defined in the regulations and which may be generated from equipment used to construct the remedy.	These regulations are **Relevant and Appropriate** to evaluating how emissions may be minimized or reduced during construction of the remedy, including sediment and soil excavation and handling activities.	Remedial actions will be designed and performed in compliance with the standards.
WAC 173-400-040 "General Standards for Maximum Emissions"	All sources and emission units are required to meet the general emission standards unless a specific source standard is available. General standards apply to visible emissions, fallout, fugitive emissions, odors, emissions detrimental to persons and property, sulfur dioxide, concealment and masking, and fugitive dust.	State regulations defining methods of control to be employed to minimize the release of contaminants associated with fugitive emissions are **Applicable** to upland remedial actions that may generate fugitive emissions, including particulate matter (dust).	Remedial actions that have the potential to release air emissions will meet standards.
WAC 173-400-075 "Emission Standards for Sources Emitting Hazardous Air Pollutants"	Establishes emission standards for hazardous air pollutants. Adopts, by reference, "National Emission Standards for Hazardous	State regulations defining emission standards may be **Applicable** to upland remedial actions, including the cement batch plant.	Remedial actions will be designed and performed in compliance with the standards.

Commented [PHS(1]: Per AAG's consultation, WAC citations relevant to stormwater permits requiring best management practices to prevent discharge of stormwater, the citations are WAC 173-201A-510(3)(a), (b) and (c).

	Air Pollutants" (NESHAP [40 CFR 61]) and appendices.		
Regulation I and Regulation III, Puget Sound Clean Air Agency	Regulation I establishes rules and standards that are generally applicable to the control and/or prevention of the emission of air contaminants from all sources within the jurisdiction of the Agency. Regulation III establishes standards to reduce the ambient concentrations of toxic air contaminants in the Puget Sound region and thereby prevent air pollution. The major requirements of this regulation are implementation of Best Available Control Technology for sources of toxic air pollutant emissions from new and existing sources.	Soil and/or groundwater remedial actions have the potential to emit emissions subject to these standards. The Acceptable Source Impact Levels (ASILs) are Relevant and Appropriate for use in the air monitoring program during construction.	Remedial actions will be designed and performed in compliance with the standards
Federal: Clean Air Act of 1990 and amendments; "National Emission Standard for Asbestos" (40 CFR 61, Subpart M)			
National Emission Standards for Asbestos, 40 CFR 61.150(a)(1)(i) - (v)	40 CFR 61.150(a) requires that there be no visible emissions to the outside air during collection, processing, packaging, or transporting of any asbestos-containing waste material. Subsections (a)(1)(i) and (ii) require that asbestos-containing waste material be adequately kept wet and provide how to keep such wet so as not to discharge any visible emissions to the outside air. Subsection (a)(1)(iii) requires that after wetting, seal all asbestos-containing waste material in leak-tight containers while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight wrapping. Subsections (a)(1)(iv) and (v) require: Label the containers or	**Applicable** as standards should asbestos be found during excavation and demolition of subsurface structures (for example, asbestos-wrapped piping)	Site remediation activities and associated handling, packaging, transportation and disposal of ACM will meet standards.

	wrapped materials specified in paragraph (a)(1)(iii) of this section using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(4) or 1926.1101(k)(8). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible. For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.		
National Emission Standards for Asbestos, 40 CFR 61.150(b)(1) and (2) and (c)	40 CFR 61.150(b)(1) and (2) require: All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at a waste disposal site operated in accordance with the provisions of § 61.154, or an EPA-approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of § 61.155. Subsection (c) requires: Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must conform to the requirements of §§ 61.149(d)(1) (i), (ii), and (iii).	**Applicable** to offsite transportation, treatment and disposal of any asbestos-containing waste material encountered during excavation and demolition of subsurface structures.	Site remediation activities and associated handling, packaging, transportation and disposal of ACM will meet standards.

Solid and Dangerous Waste			
State: Washington Hazardous Waste Management (RCW 70.105, as amended)/Washington Dangerous Waste Regulations (WAC 173-303)			
WAC 173-303-016 "Identifying Solid Waste"	Identifies those materials that are and are not solid wastes and identifies those materials that are and are not solid wastes when recycled.	Solid waste identification requirements are **Applicable** to solid wastes generated during remedial actions.	Standards will be met for remediation activities
WAC 173-303-070 "Designation of Dangerous Waste"	Establishes the requirements for determining if a solid waste is a dangerous waste (or an extremely hazardous waste), for making quantity determinations and for small quantity generators.	Hazardous waste characterization and determination is **Applicable** to wastes generated during remedial actions, such as soil contamination, sediment contamination debris that will be disposed offsite.	
WAC 173-303-077 "Requirements for Universal Waste"	Identifies certain batteries, mercury-containing equipment and lamps as exempt from regulation under WAC 173-303-140 and WAC 173-303-170 through 173-303-9907 (excluding WAC 173-303-960) and except as specified in WAC 173-303-573. These wastes are subject to "Standards for Universal Waste Management" (WAC 173-303-573).	May be **Applicable,** should any any equipment be uncovered that contains universal wastes during debris removal activities	Standards will be met for remediation activities that generate universal wastes. Helen: Doubt this would be applicable because there is very little equipment left on the site; but I suppose it is possible. Leave in just in case?
WAC 173-303-140 "Land Disposal Restrictions"	Establishes land disposal restrictions, including waste and applicable treatment standards determinations, and storage and disposal prohibitions.	**Applicable** to onsite management of dangerous waste generated during remedial action, including contaminated soils slated for treatment and burial beneath the final site cap.	The remedy for upland soils and groundwater is a containment remedy. Soils within the Waste Management Area established in the RODA will not meet land disposal restrictions, but any soils contaminated above LDR levels will be reliably contained by the perimeter wall, the final site cap, and through soil treatment to reduce contaminant mobility. Management of any contaminated soils outside the waste management area will comply with disposal restrictions.

WAC 173-303-170 "Requirements for Generators of Dangerous Waste"	Establishes the requirements for dangerous waste generators. "Requirements for Generators of Dangerous Waste" (WAC 173-303-170[3]) includes the substantive provisions of "Accumulating Dangerous Waste On Site" (WAC 173-303-200) by reference.	**Applicable** to remedial actions that may generate dangerous wastes.	Remediation wastes (e.g. contaminated soil, personnel protective gear, recovered NAPL) may be dangerous waste, and will be managed in accord with these requirements.
WAC 173-303-200 "Accumulating Dangerous Waste On Site"	Establishes the requirements for accumulating wastes onsite. "Accumulating Dangerous Waste On Site" (WAC 173-303-200) includes certain substantive standards from "Use and Management of Containers (WAC 173-303-630) and "Tank Systems" (WAC 173-303-640) by reference.	State rules establishing requirements for accumulating dangerous waste on site are **Applicable** for managing remediation wastes generated at the site including soil, groundwater, and sediment contamination, contaminated debris, used personal protective equipment, and treatment chemicals.	Management of remediation wastes that are dangerous waste will comply with these requirements.
WAC 173-303-630 "Use and Management of Containers", WAC 173-303-280(6) "General Requirements", and WAC 173-303-610(2), (4) and (5) "Closure"	Establishes requirements for management of dangerous waste in containers.	This standard is **Applicable** to remedial actions that involve management of dangerous waste in containers that are subject to this standard.	Remedial actions that produce or manage containers of dangerous waste will be managed to meet standards.
WAC 173-303-64690 "Staging Piles"	Establishes the substantive requirements for temporary storage of solid, non-flowing remediation waste during remedial operations (incorporates by reference 40 CFR 264.554 requirements).	**Relevant and Appropriate** for management of remediation wastes including contaminated soil piles that may be generated and accumulated during construction.	Standards will be met for remediation waste.
40 CFR Part 264, "Standards for owners and operators of hazardous waste treatment, storage, and disposal (TSD) facilities" Helen: need to list corresponding WAC parts, and	These regulations provide standards for location, design, operation, and closure of units in which treatment of hazardous waste may occur at the transloading facility. These regulations also provide requirements for use and management of containers, tank systems, surface	The listed requirements of Part 264 are **Applicable** to the siting, design, operation, and closure of any containers, tank systems, surface impoundments, waste piles or land treatment areas used for the storage (over 90 days) and/or treatment of	Helen: Need Ecology's help with this one. We need to list the applicable WAC requirements, not the federal CFR sections. Need to list only the subparts that may apply.

Commented [PHS(2]: Per AAG's consultation, citations relevant to standards for owners and operators of hazardous waste TSDs, the citation is WAC 173-303-280(6), to the extent the site meets the definition of a "cleanup only facility." Based on AAG's understanding of the site, and the definition of "cleanup only facility" in WAC 173-303-040, I believe this is the appropriate citation.

list specific sub-parts that may apply WAC 173-303-280(6) & WAC 173-303-040.	impoundments, waste piles, and land treatment units one or more of which may be used for the storage and treatment of hazardous waste at the transloading facility. Subparts AA, BB, and CC provide air emission standards for process vents, equipment leaks, and tanks, surface impoundments and containers may be used at the transloading facilty.	hazardous waste on-site prior to disposal off-site. Remedial activities that could trigger these requirements at the Wyckoff site may include but are not limited to: stockpiling of contaminated soils during upland excavation and treatment via in-situ solidification / stabilization, and treatment of contaminated groundwater including storage of contaminated treatment media (GAC) and recovered NAPL in onsite tanks for more than 90 days.	
State: Solid Waste Management - Reduction and Recycling (RCW 70.95, as amended); Solid Waste Handling Standards (WAC 173-350); Labeling and packaging requirements for transportation of hazardous materials (49 CFR 171)			
WAC 173-350-025 “Owner Responsibilities for Solid Waste", WAC 173-350-040 “Performance Standards”, WAC 173-350-300 "On-Site Storage, Collection and Transportation Standards", WAC 173-350-900 “Remedial Action”	Establishes minimum functional performance standards for the proper handling and disposal of solid waste, not otherwise excluded. Provides requirements for the proper handling of solid waste materials originating from residences, commercial, agricultural and industrial operations, and other sources, and identifies those functions necessary to ensure effective solid waste handling programs at both the state and local level.	Requirements are **Applicable** for covered solid waste generated during implementation of remedial actions. Remedial actions that generate covered solid waste will meet standards.	Remedial actions that generate covered solid waste will meet standards.
49 CFR § 171.1(b), Hazardous Material Regulations, pre-transportation functions	Any person who, under contract with a department or agency of the federal government, transports “in commerce,” or causes to be transported or shipped, a hazardous material shall be subject to and must comply with all applicable provisions of the HMTA and HMR at 49 CFR 171 - 180 related to marking, labeling,	**Applicable** to transportation of hazardous materials such as NAPL recovered from the groundwater treatment system	Hazardous materials that will be transported offsite will be handled consistent with these requirements.

	placarding, packaging, emergency response, etc.		
Groundwater			
WAC 173-218-040 "UIC Well Classification Including Allowed and Prohibited Wells"	Establishes criteria and standards for an underground injection control program.	State criteria and standards for an underground injection control program are **Applicable** to injection activities at the site. In areas of deep soil contamination, Portland cement, bentonite and other reagents will be injected through vertical wells or direct push wells.	Groundwater remedial activities involve underground injection which will satisfy substantive requirements. Helen: I am not sure this is applicable because I am not sure sure that jet grouting is done through a well.
Well Construction			
WAC 173-160-161 "How Shall Each Water Well Be Planned and Constructed?"	Identifies well planning and construction requirements. Water wells must not be a conduit for contamination and be constructed to yield the necessary quantity of water.	State requirements for well installation are **Applicable** standards. The selected remedy includes installation of new extraction and monitoring wells in both the Upper and Lower Aquifers.	The selected remedy will comply by constructing water wells that meet these standards.
WAC 173-160-181 "What Are the Requirements for Preserving the Natural Barriers to Ground Water Movement Between Aquifers?"	Identifies the requirements for preserving natural barriers to groundwater movement between aquifers.	State requirements for well installation are **Applicable** standards. The selected remedy includes installation of new extraction and monitoring wells in both the Upper and Lower Aquifers.	The selected remedy will comply by constructing water wells that meet these standards.
WAC 173-160-400 "What Are the Minimum Standards for Resource Protection Wells and Geotechnical Soil Borings?"	Identifies the minimum standards for resource protection wells and geotechnical soil borings.	State requirements for well installation and soil borings are **Applicable** standards. The selected remedy includes installation of new extraction and monitoring wells and soil borings in both the Upper and Lower Aquifers.	The selected remedy will comply by conducting soil borings and constructing water wells that meet these standards.
WAC 173-160-420 "What Are the General Construction Requirements for Resource Protection Wells?"	Identifies the general construction requirements for resource protection wells.	State requirements for well installation are **Applicable** standards. The selected remedy includes installation of new extraction and monitoring wells in both the Upper and Lower Aquifers.	The selected remedy will comply by constructing water wells that meet these standards.

WAC 173-160-430 "What Are the Minimum Casing Standards?"	Identifies the minimum casing standards.	State requirements for well installation are **Applicable** standards. The selected remedy includes installation of new extraction and monitoring wells in both the Upper and Lower Aquifers.	The selected remedy will comply by constructing water wells that meet these standards.
WAC 173-160-440 "What Are the Equipment Cleaning Standards?"	Identifies the equipment cleaning standards for construction and maintenance of wells.	State requirements for well installation are **Applicable** standards. The selected remedy includes installation of new extraction and monitoring wells in both the Upper and Lower Aquifers.	The selected remedy will comply by constructing water wells that meet these standards.
WAC 173-160-450 "What Are the Well Sealing Requirements?"	Identifies the well sealing requirements for resource protection wells.	State requirements for well installation are **Applicable** standards. The selected remedy includes installation of new extraction and monitoring wells in both the Upper and Lower Aquifers.	The selected remedy will comply by constructing water wells that meet these standards.
WAC 173-160-460 "What Is the Decommissioning Process for Resource Protection Wells?"	Identifies the decommissioning process for resource protection wells.	State requirements for well decommissioning are **Applicable** standards. The selected remedy includes closure and removal of some of the existing extraction and monitoring wells in the ISS treatment area.	The selected remedy will comply by decommissioning water wells in a manner that meets these standards.
Sediment Cleanup			
WAC 173-204-570 Selection of cleanup actions.	Sediment cleanup actions must comply with the sediment cleanup standards, use permanent solutions to the maximum extent practicable, provide for a reasonable restoration time frame and shall not rely exclusively on monitored natural recovery or institutional controls and monitoring where it is technically possible to implement a more permanent cleanup action.	**Applicable** Washington SMS requirements for selection of cleanup actions related to cleanup of nearshore sediments.	The selected remedy for intertidal sediments includes dredging and capping but relies on monitored natural attenuation to achieve remedial goals outside the active cleanup areas. This is an interim action focused on source control. Any additional actions, if needed, will be selected in the final ROD.

WAC 220-110 “Hydraulics Project Approval Regulations,” subsections 220-110-270 “Common Saltwater Technical Provisions,” 220-110-271 “Prohibited Work Times in Saltwater Areas,” 220-110-280 “Bulkheads and Bank Protection in Saltwater Areas”, and 110-220-320 “Dredging in Saltwater Areas.”	Places restrictions on construction project in marine and freshwater environments in order to protect and restore fish habitat	**Applicable** to cleanup actions in intertidal sediments	The selected remedy will comply to the extent feasible and will include measures to mitigate for unavoidable impacts to intertidal marine habitat.